



U.S. Department of Transportation

Pipeline and Hazardous Materials

COMPETENT AUTHORITY CERTIFICATION FOR A TYPE B(U)

RADIOACTIVE MATERIALS PACKAGE DESIGN Safety Administration CERTIFICATE USA/9036/B(U)-96, REVISION 14

This certifies that the radioactive material package design described has been certified by the Competent Authority of the United States as meeting the regulatory requirements for a Type B(U) packaging for radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America².

- Package Identification C-1. 1.
- Package Description and Authorized Radioactive Contents as described 2. in U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9036, Revision 11 (attached).

General Conditions -

- Each user of this certificate must have in his possession a copy a. of this certificate and all documents necessary to properly prepare the package for transportation. The user shall prepare the package for shipment in accordance with the documentation and applicable regulations.
- original this certificate, other than the Each user of b. petitioner, shall register his identity in writing to the Office (PHH-23), Pipeline Hazardous Materials Technology, Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington D.C. 20590-0001.
- This certificate does not relieve any consignor or carrier from c. compliance with any requirement of the Government of any country through or into which the package is to be transported.
- Records of Quality Assurance activities required by Paragraph d. 310 of the IAEA regulations shall be maintained and made available to the authorized officials for at least three years shipment authorized by this certificate. after the last Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.

¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Revised), " published by the TS-R-1 (ST-1, No. (Revised), International Atomic Energy Agency (IAEA), Vienna, Austria.

² Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

CERTIFICATE USA/9036/B(U)-96, REVISION 14

- 4. Marking and Labeling The package shall bear the marking USA/9036/B(U)-96 in addition to other required markings and labeling.
- 5. <u>Expiration Date</u> This certificate expires on October 31, 2011. On October 31, 2006, this certificate supersedes all previous revisions of USA/9036/B(U)-96.

This certificate is issued in accordance with paragraph 808 of the IAEA Regulations and Section 173.471 of Title 49 of the Code of Federal Regulations, in response to the August 22, 2006 petition by Source Production and Equipment Company, St. Rose, LA and in consideration of other information on file in this Office.

Certified By:

Robert A. McGuire

Associate Administrator for Hazardous Materials Safety

Aug 28 2006

(DATE)

Revision 14 - Issued to endorse U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9036, Revision 11, which authorizes additional contents and extends the expiration date.

NRC FORM 618			U.S. NUCLEAR REGI	JLATORY	COMMIS	SSION
(8-2000) 10 CFR 71	CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES					
a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE		PAGES
9036	11	71-9036	USA/9036/B(U)-96	1_1_	OF	2

2. PREAMBLE

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.
- 3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION
 - a. ISSUED TO (Name and Address)

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

Source Production & Equipment Co. 113 Teal Street St. Rose, LA 70087-9691 Source Production & Equipment Company application dated February 28, 2001.

4. CONDITIONS

5.

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

(a) Packaging

(1) Model No.: C-1

(2) Description

The packaging consists of a steel inner unit inside an outer overpack. The inner unit is a rectangular box approximately 9" high x 7.5" wide x 7.5" deep around a depleted uranium shield. All fittings and source locking components are protected and enclosed within the 1/8" carbon steel outer shell. The inner receptacle consists of a uranium shield equipped with two closed bottom Zircalloy or titanium "J" tubes, each of which may house one "pigtail type" special form source. The overpack is a 12-gallon, 20- or 22-gage steel drum partially filled with foam. The weight of the inner unit is 51 to 70 lbs. The weight of the overpack is 19 to 22 lbs. Up to 8 lbs. of ancillary equipment may be included within the overpack. The maximum gross weight of the package is 100 lbs.

(3) Drawings

The package is constructed in accordance with Source Production & Equipment Company Inc. Drawing Nos. B322000, Rev. (3); B311000, Rev. (2); B311001, Rev. (1); and B311002, Rev. (0).

(b) Contents

(1) Type and form of material

Iridium-192, Selenium-75, and Ytterbium-169 as sealed sources that meet the requirements of special form radioactive material.

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(0)	(6-2000) 10 CFR 71 CERTIFICATE OF COMPLIANCE						
Ш	FOR RADIOACTIVE MATERIAL PACKAGES						
П	. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE		PAGES
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- (b) Contents cont'd
 - (2) Maximum quantity of material per package

Two sealed sources with a combined activity not to exceed 300 curies.

- 6. Tungsten shield pads, with dimensions up to approximately 2-inches diameter and 1/2-inch thick, may be welded to the inside surface of the source changer housing.
- 7. The nameplate shall be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining its legibility.
- 8. In addition to the requirements of Subpart G of 10 CFR Part 71:
 - a. The package shall be prepared for shipment and operated in accordance with the Operating Procedures of Section 7.0 of the consolidated application dated February 28, 2001, as supplemented June 23, 2006.
 - b. The package must meet the Acceptance Tests and Maintenance Program of Section 8.0 of the consolidated application dated February 28, 2001, as supplemented June 23, 2006.
- 9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.
- 10. Revision No. 10 of this certificate may be used until October 31, 2007.
- 11. Expiration date: October 31, 2011.

REFERENCES

Source Production & Equipment Company applications dated September 27, 2000, and February 28, 2001.

Supplements dated: April 11 and May 11, 2001; and May 1, June 14 and June 23, 2006.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Christopher Regan, Acting Chief Licensing Section Spent Fuel Project Office Office of Nuclear Material Safety and Safeguards

Date:	August 7	, 2006
Duic.		, 2000

U.S. NUCLEAR REGULATORY COMMISSION NRC FORM 618 (8-2000) CERTIFICATE OF COMPLIANCE 10 CFR 71 FOR RADIOACTIVE MATERIAL PACKAGES d. PACKAGE IDENTIFICATION NUMBER PAGE a. CERTIFICATE NUMBER b. REVISION NUMBER c. DOCKET NUMBER OF 2 1 9036 11 71-9036 USA/9036/B(U)-96

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U.S. NUCLEAR REGULATORY COMMISSION NRC FORM 618 (8-2000) 10 CFR 71 CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES PAGE d. PACKAGE IDENTIFICATION NUMBER PAGE b. REVISION NUMBER c. DOCKET NUMBER a. CERTIFICATE NUMBER 2 OF 2 USA/9036/B(U)-96 11 71-9036 9036

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